

**GRANT AGREEMENT G0500092 BETWEEN  
STATE OF WASHINGTON DEPARTMENT OF ECOLOGY  
and  
BERTRAND WATERSHED IMPROVEMENT DISTRICT**

THIS is a binding agreement entered into by and between the State of Washington, Department of Ecology (P.O. Box 47600, Olympia, Washington, 98504-7600), hereinafter referred to as the DEPARTMENT and Bertrand Watershed Improvement District hereinafter referred to as the RECIPIENT to carry out the activities described herein.

**RECIPIENTs Legal Address:**

Name – Bertrand Watershed Improvement District (WID)

Mailing Address – 1796 Front Street

City, State, Zip - Lynden, WA, 98264

RECIPIENT's Authorized Representative: Henry Bierlink, Administrator

RECIPIENT's Telephone Number: 360-354-1337

RECIPIENT's Project Coordinator: Henry Bierlink

The source of funds provided by the DEPARTMENT is State/Local Improvement Revolving Account – Water Supply Facilities (Referendum 38).

For the purpose of this agreement, the Project Officer assigned for the DEPARTMENT will be Doug Allen, (360) 738-6244.

Grant Amount: \$300,000

Eligible Project Costs: \$300,000

DEPARTMENT Share: \$300,000

Share: \$300,000

The effective date of this grant is September 1, 2004.

This agreement shall expire no later than December 31, 2006

## SCOPE OF WORK

### General Project Description

This grant agreement is to address measures that will enable the RECIPIENT to plan and construct early action projects (*See section 213(2), Governor's proposed supplemental capital budget*). It will fund priority actions identified in the early action plan developed by the RECIPIENT.

The RECIPIENT has identified and prioritized proposed early actions and created an action plan. The plan takes advantage of the momentum created by the CIDMP effort, and includes projects and the evaluation of potential future mitigation options.

The proposed budget is shown below. A narrative description of each of the projects in terms of scope, schedule, and budget follows.

### TOTAL BUDGET

TASK	PROJECT	TOTAL COSTS
1	Project Administration\Scope Development	\$ 26,000
2	StreamFlow Enhancement Project	\$100,000
3	Enhance Fish Passage Project	\$70,000
4	Bertrand PUD Irrigation Project	\$10,000
5	Deep Aquifer Exploration Project	\$ 40,000
6	Habitat Enhancement Project	\$31,500
7	Monitoring Project	\$22,500
	<b>Total Costs</b>	<b>\$300,000</b>

### TASK #1

#### PROJECT ADMINISTRATION\SCOPE DEVELOPMENT

Completion of these projects and the overall success of the entire effort to demonstrate the potential of using watershed improvement districts to achieve the purposes and goals of water, wildlife, and land managers, depends on the active involvement of the watershed residents and specifically the RECIPIENT's Board of Directors.

**SCOPE:** Create an initial Scope for the entire grant by working from the priorities created in the Comprehensive Irrigation District Management Plan guided by the Board of the Bertrand WID and within the purposes intended by the 2004 Legislature in the Capital Budget.

Facilitate the meetings and education of the Board and watershed residents throughout the project. Solicit and summarize feedback on projects from local governments, agencies, Lummi Nation, Nooksack Tribe, wildlife agencies, and local non-profits dedicated to stream restoration. Insure actions taken are clearly the priority actions and have the local support needed to move the WID closer to the goal of a fully functioning natural system that meets the goals of all water, wildlife, and land managers. Cost estimates for this task is \$2,500 for public outreach and an average of 12 hours per month @ \$45/hr for the life of the grant.

Provide financial administration throughout the life of the grant by processing all bills and payments and providing reports as required. Cost estimates for this task is 4 hours per month @ \$45/hr for the life of the grant.

**SCHEDULE:** Task to be completed by the end of December, 2006.

**OUTCOME\PRODUCT:** Scope, grant compliance, financial management, public participation

#### **BUDGET**

<b>Project Elements</b>	<b>Cost</b>	<b>Estimated Start Date</b>	<b>Estimated Completion Date</b>
Financial Management	\$ 5,000	9/01/04	12/31/06
Facilitation	\$17,500	09/01/04	12/31/06
Scope Development	\$ 3,500	09/01/04	11/30/04
Total	\$26,000		

#### **Primary Contacts**

Henry Bierlink, Administrator  
 Whatcom County Ag Preservation Committee (360) 354-1337  
 Tony Leonard, Project Manager  
 Reichhardt & Ebe (360) 354-3687

#### **TASK #2**

##### **STREAM FLOW ENHANCEMENT THROUGH WATER TRANSFERS/AUGMENTATION**

Conduct a study to determine the feasibility of augmenting streamflows with groundwater by transferring water rights from surface to groundwater sources. Test wells will be drilled, and pumping tests and water quality analyses completed to determine the feasibility and costs of this option. Implement viable and cost-effective projects as funding allows.

The WRIA 1 Instream Flow Selection (ISF) and Adoption Action Plan is a critical part of the WRIA 1 Project and the forthcoming WRIA 1 Watershed Management Plan. The intent behind the WRIA 1 ISF Action Plan is to agree to flows at a drainage level. This will require outreach, discussions, and negotiations with property owners in the watershed. The opportunity to merge

the work of the WRIA 1 ISF Working Group and the WRIA 1 Action Plan with the immediate needs of the RECIPIENT will be used to pilot the ISF Action Plan.

Rights to water in the state fall into two categories: 1) surface water; and; 2) groundwater. The RECIPIENT understands that there may be property owners within the watershed that are not using all of their allocated water, especially groundwater. It may be possible to utilize more of the groundwater resource and draw less from the creek system, thereby increasing flows to better achieve in-stream flow requirements, primarily during the dry summer months.

An inventory of existing water rights compared to usage is required. Most of the work to do this was performed for the Bertrand CIDMP. The RECIPIENT will build upon what has been done and coordinate with Whatcom County in terms of public outreach activities and processes performed and underway. The RECIPIENT will also investigate the feasibility/legality of transferring water rights from surface to groundwater.

It is acknowledged that there is much less known about groundwater in the area than surface water. The RECIPIENT commits to active participation in the WRIA #1 Watershed Plan and the use of the models created by Utah State University that have developed from that Plan. These models should be available in early 2005 and some will help us better understand groundwater-surface water interaction. The RECIPIENT will also make use of a groundwater study being developed by Washington State University and funded by Whatcom County which will provide additional information of county groundwater issues with a focus in the Bertrand. This study will also identify data gaps and possible means of addressing them.

Creation of a "Water Bank" to transfer water rights from surface to groundwater has been done in other places such as Colorado. Under this concept, the RECIPIENT would serve as a broker. It would do the following: 1) quantify what rights are available and what is being used 2) accumulate valid and transferable unused rights into a pool that other property owners in the watershed can draw upon; and, 3) devise and implement a system whereby the water rights can be properly allocated. This will entail development of a financial system to compensate the property owners that relinquish water rights.

Work also includes providing financial assistance to property owners for the costs to drill wells and implement the necessary piping system. It is envisioned that the RECIPIENT would offer an 80% cost share on a competitive basis to those who apply to convert surface water withdrawals to groundwater.

**SCOPE:** Research processes in place to determine the optimum approach to make the transfer of surface water to groundwater water rights happen. Develop and distribute a mailer to the landowners addressing the potential benefits of converting water usage from the surface to the aquifer. Implement the improvements, at least under a pilot program, to demonstrate its viability.

**SCHEDULE:** Task to be completed by the end of June 2005.

**OUTCOME\PRODUCT:** Water transfers, water bank/brokerage, cost share program

**BUDGET**

<b>Project Elements</b>	<b>Cost</b>	<b>Estimated Start Date</b>	<b>Estimated Completion Date</b>
Water Bank/Brokerage	\$50,000	9/01/04	12/31/05
Surface to Ground Water cost-share program	\$50,000	02/01/05	06/30/05
Total	\$100,000		

**Primary Contacts**

Beth Chisholm                      Whatcom County Conservation District  
 Bob Powell                        EES/HDR 360-424-0909

**TASK #3****ENHANCE FISH PASSAGE**

Whatcom County has completed an inventory of culverts within the watershed (both public and private roads). They are developing a prioritized list of sites that need to be improved using methods set forth by WDFW, SSHEAR program. To date, up to 28 locations that pose as barriers to fish passage have been identified. Most of these are in the southern 1/3 of the US portion of the watershed on tributaries to the main channel.

The RECIPIENT stands ready to put in fish ladders, screens, or clean culverts within the Bertrand Creek watershed once the County's inventory is completed. The RECIPIENT envisions creating a cost-share program to be made available to RECIPIENT's members who propose fish passage or habitat improvements on their land. The RECIPIENT will accept applications, review them for their cost-effectiveness and how they address priority areas for the WID, and fund a portion of the design and construction costs related to these projects.

**SCOPE:**        Clean/Rehab culverts within the watershed in concert with the County's prioritized program.

**SCHEDULE:** Work to be completed by December 31, 2005.

**OUTCOME\PRODUCT:**    Completed projects

**BUDGET:**

<b>Project Elements</b>	<b>Cost</b>	<b>Estimated Start Date</b>	<b>Estimated Completion Date</b>
Design and Construction	\$70,000	08/05	10/07
Total	\$70,000		

**Primary Contacts:**

Steve Fox      Whatcom County (676-6730, 815-3809)  
 Beth Chisholm WCD (354-2035 x 114)  
 Chris Clark    WCD (815-5359)

**TASK #4****BERTRAND PUD IRRIGATION PROJECT**

PUD # 1 is not currently utilizing their full water right. The RECIPIENT will coordinate with the PUD to assess the feasibility of transferring some of the unused water right to the RECIPIENT for domestic/agricultural purposes or to augment stream flows in Bertrand Creek.

The RECIPIENT and Public Utility District #1 will determine the most effective and efficient method of forming, funding, developing and operating an Irrigation Division within the District service area that would serve the agricultural water needs within the WID and beyond.

This is a long-term project. It will be necessary to build a transmission and distribution system. Design and construction costs are in the \$2.5 Million to \$4 million range.

**SCOPE:**      Continue to discuss the potential for this element of work with the PUD and other agencies. Develop a conceptual design sufficient for budgeting purposes.

**SCHEDULE:** Complete conceptual design by April 30, 2005.

**OUTCOME\PRODUCT:** Report, feasibility study

**BUDGET:**    \$10,000 for the conceptual design and coordination effort.

<b>Project Elements</b>	<b>Cost</b>	<b>Estimated Start Date</b>	<b>Estimated Completion Date</b>
Study and Reports	\$10,000	9/04	12/05
Total	\$10,000		

**Primary Contacts**

Tom Anderson      Public Utility District No. 1    384-4288

**TASK #5****DEEP AQUIFER**

A deep aquifer exists in the northern portion of the watershed that, if developed properly may supply water within the WID. The RECIPIENT has been coordinating with Delta Water Assoc. regarding teaming to assess this resource. It is a project that has the potential to benefit all parties as well as the hydrology in the area.

**SCOPE:** Continue the coordination effort, develop a testing program, enact the testing program and document the results. If the deep aquifer proves to provide abundant quantities of water that meets the quality standards for irrigation and/or domestic supply and is economically feasible, the next step would be to tap it further and construct the infrastructure to transport the water to either the property owners or the stream system.

**SCHEDULE:** Drill a test well by June 30, 2005.

**OUTCOME\PRODUCT:** Well Reports, feasibility study

**BUDGET:** Drilling a new well, testing it, providing the containment system and testing could cost up to \$40,000. It appears as if Delta Water Assoc. will cost share on a 50% basis. The RECIPIENT's portion for coordination, the well, testing, etc. is estimated to be around \$20,000.

Project Elements	Cost	Estimated Start Date	Estimated Completion Date
Study and Reports	\$20,000	9/01/04	12/31/04
Test Well (RECIPIENT)	\$20,000	4/30/05	6/30/05
Total	\$40,000		

### **Primary Contacts**

Chuck Lindsay      Assoc. Earth Sciences, Inc. (425) 259-0522

### **TASK #6**

#### **HABITAT ENHANCEMENT**

Work that falls in this category would be to do in-stream improvements at specific locations to increase the complexity of the stream by making the channel longer, installing woody debris to create pools and implementing buffer strips to keep livestock out of the stream. The RECIPIENT proposes to do this or, alternatively, enlist the input of property owners bordering Bertrand Creek and its tributaries to identify locations and types of improvements.

**SCOPE:** Coordinate with property owners and identify locations where improvements are warranted. Design and construct improvements.

**SCHEDULE:** Complete in-stream improvements by December 31, 2006.

**OUTCOME\PRODUCT:** Completed projects, cost share program

**BUDGET:** \$31,500 to coordinate, design, and construct habitat enhancement projects.

<b>Project Elements</b>	<b>Cost</b>	<b>Estimated Start Date</b>	<b>Estimated Completion Date</b>
Habitat Enhancements	\$31,500	Ongoing	Ongoing
Total	\$31,500		

**Primary Contacts**

Bruce Roll                      Whatcom County PW Dept. (676-6692)  
Paula Cooper    Whatcom County PW Dept. (676-6786)  
Wendy Scherrer        NSEA (715-0283)  
Jeremy Freimund       Lummi Nation (384-2212)

**TASK #7****MONITORING**

There are two programs underway, one by WCPW; the other by the Conservation Dist. Funding for the first ends in August 2005; the second in April.

The RECIPIENT proposes to continue monitoring in the watershed after these programs end. Coordination with DOE has been effected to determine what needs to be monitored to satisfy their needs as well as establish a credible baseline to assess the worth of future RECIPIENT projects.

**SCOPE:**        Monitor flow, temp, fecal coliform, DO, pH, conductivity & Total Suspended Solids (TSS). Three (3) sites (at the border, at Badger Rd. and at Willeys Lk. Road to be monitored giving readings at the top, bottom, and middle of the watershed. Frequency would be monthly although the budget would be set up for this task to either increase the frequency or add additional sites as appropriate.

**SCHEDULE:** Work will commence in October 2004 and continue for two years.

**OUTCOME\PRODUCT:**    Monitoring sites, reports

**BUDGET:**        Costs for the work are estimated at \$22,500 on for monitoring at the three sites.

<b>Project Elements</b>	<b>Cost</b>	<b>Estimated Start Date</b>	<b>Estimated Completion Date</b>
Monitoring	\$22,500	Ongoing	Ongoing
Total	\$22,500		

**Primary Contacts:**

Sue Blake                      Whatcom County Public Works Dept. (676-6876)  
Jeremy Freimund        Lummi Nation (384-2212)  
Michael Cochran        NWIC (676-2772)  
Beth Chisholm            Whatcom Conservation Dist. (354-2035 x 114)



SPECIAL TERMS AND CONDITIONS

A. PAYMENTS TO THE RECIPIENT

Request for reimbursement for development and administrative costs shall be submitted monthly by the RECIPIENT on a state invoice form (A19-1A, Form A) provided by the DEPARTMENT. All requests for payment shall be consistent with the budget tasks as listed in the budget section of this agreement with sufficient supporting detail identifying total project costs

B. FINANCIAL GUIDELINES

The RECIPIENT shall comply with the DEPARTMENT's current edition of the "Administrative Requirements for Ecology Grants and Loans" (Ecology publication number 91-18). The RECIPIENT shall be responsible for maintaining appropriate financial records throughout the life of the project and in accordance with these guidelines.

C. REPORTS

The RECIPIENT shall prepare and furnish to the DEPARTMENT the following reports:

The RECIPIENT will submit a brief Monthly Project Report on Project accomplishments and efforts. The Monthly Project Report will be submitted with the request for payment.

Upon completion of the Project, a Final Programmatic Report shall be submitted to the DEPARTMENT summarizing the accomplishments achieved during the term of the Agreement and a representative number of digital photos (preferred) or color 35 mm slides depicting the Project and copies of all publications, press releases and other appropriate "product" and deliverables resulting from the Project should also be provided to the DEPARTMENT as part of the Final Report. The RECIPIENT shall provide three (3) printed copies and an electronic copy of the Final Programmatic Report to the DEPARTMENT.

E. WORK TO BE PERFORMED

To the extent that funds therefore may now or hereafter be available pursuant to the terms of this grant, the RECIPIENT shall, on its own account, or by contract or contracts, undertake the work and special conditions, described and set forth in the Scope of Work of this grant.

F. ALL WRITINGS CONTAINED HEREIN

This agreement, consisting of the Grant Agreement, Scope of Work, Special Terms and Conditions and the appended "General Terms and Conditions," the DEPARTMENT's current edition of "Administrative Requirements for Ecology Grants and Loans," contains the entire understanding between the parties, and there are no other understandings or representations set forth or incorporated by reference herein. No subsequent modification(s) or amendment(s) of this agreement shall be of any force or effect unless in writing, signed by authorized representatives of the RECIPIENT and DEPARTMENT, and made a part of this agreement; EXCEPT, that in relation to change of the DEPARTMENT's Project Officer, or the RECIPIENT's Project Coordinator as set forth on the Grant Coversheet, either party may make such change by sending a letter to that effect without the signature of the other party; EXCEPT, that in relation to the effective date and time for performance on the Coversheet, the DEPARTMENT may modify or amend the grant agreement without the signature of the other parties.

IN WITNESS WHEREOF, the parties hereby execute this grant:

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGYBERTRAND WATERSHED  
IMPROVEMENT DISTRICT

JOE STOHR Date  
WATER RESOURCES PROGRAM MANAGER  
DEPARTMENT OF ECOLOGY

VERN VANDE GARDE PRESIDENT BERTRAND RECIPIENT	Date
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Approved as to form only by  
Assistant Attorney General.

TAX ID# 80-0099857